

Government-Industry Advisory Panel
Tension Point Development

Original Title: *5.e Operation, Maintenance, Installation, and Training (OMIT) versus detailed manufacturing and process data (DMPD)*, including such data pertaining to a major system component (MSC) DMPD

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Tension Point: Current statute and policy calls out unlimited rights for data necessary for the purposes of OMIT (other than Detailed Manufacturing or Process Data (DMPD)) and allows restrictions to be placed on DMPD. So, the tension point is when does data needed to identify and perform the purposes of maintenance become detailed manufacturing or process data?

Issue:

Title 10 USC Section 2320 outlines the requirement for regulations to apportion basic rights for data afforded to the Government based on funding determinations (private funding, mixed funding, or government funding). Title 10 USC 2320(a)(2)(C)(iii) states “Subparagraph (B) does not apply to technical data that is necessary for operation, maintenance, installation, or training (other than detailed manufacturing or process data);...” Title 10 USC 2320(a)(2)(D)(i)(I)-(III) states “Notwithstanding subparagraph (B), the United States may release or disclose technical data to persons outside the Government, or permit the use of technical data by such persons, if such release, disclosure, or use is necessary for emergency repair and overhaul; is necessary for the segregation of an item or process from, or the reintegration of that item or process) with, other items or processes; or is a release or disclosure of technical data (other than detailed manufacturing or process data) to, or use of such data, by a foreign government that is in the interest of the United States and is required for evaluational or information purposes. Title 10 USC 2320 (a)(2)(D)(ii)-(iii) state “such release, disclosure, or use is made subject to a prohibition that the person to whom the data is released or disclosed may not further release, disclose, or use such data; and the contractor or subcontractor asserting the restriction is notified of such release, disclosure, or use.”

In its implementing clause for non-commercial items, Defense Federal Acquisition Regulation Supplement (DFARS) 252.227-7013(a) defines detailed manufacturing or process data as “technical data that describe the steps, sequences, and conditions of manufacturing, processing or assembly used by the manufacturer to produce an item or component or to perform a process.” A similar definition exists for commercial items in DFARS 227.22-7015.

The Secretary of Defense through the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) have delegated to the Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)) to prescribe policy and procedures for the conduct of logistics, maintenance, materiel readiness, and sustainment support.

The ASD(L&MR) implements statutes (10 USC 2337, Life-cycle Management and Product Support; 10 USC 2460, Definition of Depot-level Maintenance and Repair; 10 USC 2464, Core Logistics Capabilities; 10 USC 2466, Limitations on the Performance of Depot-level

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Maintenance of Materiel; 10 USC 2474, Centers of Industrial and Technical Excellence: Designation; Public-Private Partnerships; etc.) through the publication of policies (e.g., DODD 4151.18, Maintenance of Military Materiel; DODI 4151.20, Depot Maintenance Core Capabilities Determination Process; etc.) and other guidance documents.

To comply with and execute these statutes, policies, and guidance documents published by the Department of Defense (DoD), Military Departments, and defense agencies, they have a need for technical data, computer software documentation, and computer software, and the associated rights and licenses, in support of the operation, maintenance, installation, and training (OMIT) activities for military equipment and software across all echelons. The DFARS 252.227-7017 (the data assertion list), paragraphs (b)-(d) require the contractor to identify that technical data, computer software documentation, and/or software that will be delivered with less than unlimited rights or where restrictions to use, release, or disclose the data is contemplated. These guidance documents are for the functional workers and do not connect OMIT activities to the DFARS technical data license concepts in DFARS 252.227-7013 and 252.227-7015. They also do not relate assertion lists which would provide notice to the functional workers of potential use restrictions when the technical data is delivered or whether these restrictions impact the IP Strategy for sustainment of the program.

MIL-STD-31000A, Department of Defense Standard Practice for Technical Data Packages defines a Technical Data Package (TDP) as “a technical description of an item adequate for supporting an acquisition, production, engineering, and logistics support (e.g. Engineering Data for Provisioning, Training, and Technical Manuals). The description defines the required design configuration or performance requirements, and procedures required to ensure adequacy of item performance. It consists of applicable technical data such as models, drawings, associated lists, specifications, standards, performance requirements, quality assurance provisions, software documentation, and packaging details.” It also defines Supplementary Technical Data as “data related to or in support of a TDP, but not an inherent part of the TDP, which is provided as reference material or is explanatory in nature. For example, Supplementary Technical Data for a particular configuration item could include manufacturing instructions, simulations, work flow data, inspection equipment or procedures (which are not required as an inherent part of the TDP or TDP element), manufacturing machine code, design studies, analysis studies, test results, safety data sheets, etc. MIL-STD-31000A is for the functional workers and does not connect OMIT activities to the DFARS technical data license concepts in DFARS 252.227-7013 and 252.227-7015 (especially in regard to restrictions on detailed manufacturing or process data), or whether these restrictions impact the IP Strategy for sustainment of the program.

ASME Y14.24-2012, Types of Engineering Drawings identifies 12 general types of engineering drawings. While this standard discusses manufacturing planning, none of the types of engineering drawings are identified as detailed manufacturing or process data. The Panel is also not aware of any guidance which would alert a functional worker as to which types of drawings are likely to contain detailed manufacturing or process data (which has the potential for restrictions on use), and which are less likely to contain detailed manufacturing or process

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data, and whether the potential use or release restrictions in detailed manufacturing or process data impact the IP Strategy for sustainment of the program.

The Military Departments obtain data through the application of commercial and/or military specifications and standards, Data Item Descriptions (DIDs), and Contract Data Requirements List (CDRL) placed in contracts. Examples include, but are not limited to: DI-SESS-81716, Supplemental Provisioning Technical Documentation; DI SES-81758A, Logistics Product Data with GEIA-STD-0007; DI-PSSS-81872A, Level of Repair Analysis (LORA) with SAE/TA-STD-0017; MIL-HDBK-1222F, Guide to the General Style and Format of U.S. Army Work Page Technical Manuals; MIL-STD-40051-1C, Preparation of Digital Technical Information for Interactive Electronic Technical Manuals or MIL-STD-50051-2, Preparation of Digital Technical Information for Page-Based Technical Manuals (TMs); and MIL-PRF-32216A, Evaluation of Commercial-Off-The-Shelf (COTS) Manuals and Preparation of Supplemental Data with DI-TMSS-80527C, Commercial-Off-The-Shelf (COTS) Manuals and Associated Supplemental Data or DI-TMSS-80528, Supplemental Data for Commercial-Off-The-Shelf (COTS) Manuals. Contractors rely on the DIDs to provide the level of data for these reports and manuals prepared under a contract, which allows for the possibility of use restrictions where detailed manufacturing or process data is required by the content of the DID. The Panel is also not aware of any guidance which would alert a functional worker as to whether a particular DID is likely to contain detailed manufacturing or process data, whether the potential use or release restrictions impact the IP Strategy for sustainment of the program, and if there is an impact, how to tailor the DID to meet the IP Strategy.

Joint Regulation Governing the Use and Application of Uniform Source, Maintenance, and Recoverability Codes (SMR) (Army Regulation 700-82, SECNAVINST 4410.23, and AFMAN 21-106). The SMR code provides maintenance activities with repair level responsibilities, support method (that is, procure, manufacture, etc.), and disposition instructions. This publication reflects the changes in terminology required by the performance specification, TechAmerica Government Electronics & Information Technology Association – Standard-0007. Source codes are assigned to support items to indicate the manner of acquiring support items for maintenance, repair, rework, or overhaul of end items and to identify items requiring special handling. “M” source coded items are to be manufactured or fabricated at specified maintenance activities. They are normally consumable items or those requiring very limited repair. Typical M series coded items include (for example, hose assemblies, tubing, name plates, decals, and wires), which have minimal likelihood of replacement during the life cycle of the end item. All the publications, manufacturing data, and required shop equipment and skills must be available at the specified maintenance activity. Maintenance codes are assigned to indicate the level of maintenance and/or maintenance activity authorized to use, remove, replace, or repair support items. Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The Panel is not aware of whether the recoverability codes are used in the creation of an IP Strategy for program sustainment, as well as whether the codes are used to ensure the correct data is being ordered based on the Depot’s assessment of repair levels for supported items.

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The DoD considers the following to be representative of, but not all inclusive of, typical preventive and corrective maintenance tasks: inspection, testing, servicing, repair, rebuilding, reclamation, adjusting, alignment, calibration, removal, replacement, paint, overhaul, lubrication, preservation, assembly/disassembly, cleaning, radio interference suppression, towing, jacking, parking, mooring, covering, hoisting, sling loading, preparation for storage, preparation for shipment/transportation, arming, loading, unloading, installing/uninstalling peripheral devices, upgrade/patch, configure, debug, and diagnostics/prognostics.

In FY2017 NDAA, 10 USC 2320 was amended to state that detailed manufacturing or process data further includes data pertaining to a major system component (MSC). In essence, for an item/software that is privately funded, DMPD is the manufacturer's "secret sauce" on how they manufacture a component. When DMPD is not delivered, this means certain depot activities may not be possible since the content of the data may not meet Depot requirements (especially for D level maintenance). However, where DMPD is delivered for OMIT activities and is subject to Limited Rights or Commercial Rights, the data licenses under DFARS 252.227-7013 and 252.227-7015 restrict the use purely to Government personnel performing repairs organically.

The Panel has received multiple comments and had multiple discussions on the relationship between data necessary for OMIT and DMPD. The Panel is unaware of a DoD document which aligns existing functional user documentation and routines (such as Depot instructions) with the legal definition of data necessary for OMIT, or how rights in the data affect Depot responsibilities for performing their duties.

The Panel recognizes this as an issue since depots are required to perform such activities by 10 U.S.C. 2464 ("organic core capability") and 2466 ("50-50 rule"). Since DMPD can be Limited Rights or Unlimited Rights depending on the levels of Government or contractor development, the Panel notes that the potential for restrictions on DMPD and Limited Rights might represent a risk to the depot to perform organic standup where local manufacturer of parts is required, and comply with the 50-50 rule if third party contractors are required, but not very often.

The Panel has received numerous industry comments that consistently indicate a normal industry reaction is to reach an agreement with particular customers for performing very detailed repair/manufacturing processes. These agreements take into account the component OEM's business expectations, and also account for quality/qualification issues. This is consistent with DFARS guidance in DFARS 227.7103-5(d)(2).

The Panel has also discussed the use of reverse engineering, with industry comments confirming that reverse engineering is a normal industry reaction to a lack of data (subject to firewall protections and patent searching). The Panel is aware of Government activities which create data through reverse engineering for the purpose of manufacturing parts when there is a diminishing supply issue.

The Panel has received specific comments from academia on the necessity of setting up second sourcing agreements. These comments are consistent with Panel discussions on the

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need to set up transition agreements, use escrow agreements, use public private partnerships, and create standard Specifically Negotiated Licenses tailored to depot activities. These recommendations have been made in other sections. The industry members of the Panel are not aware of the Depots having any specific instructions or standard agreements which a program or contracting officer can utilize for these agreements, and note the standard in the industry is to have such templates to encourage solutions to meet customer unique requirements.

The Panel has received Government comments that depots are unable to compete their maintenance functions unless DMPD is made unlimited rights, and non-OEM industry comments concur since they want to compete with the OEM for depot work. Some of these comments relate to FAA processes in relation to continued airworthiness instructions, although OEMs have maintained such instructions generally lack DMPD and are therefore consistent with current DFARS definitions of OMIT data.

The Panel has received some information from OEMs who indicate that they rely on restrictions on the DMPD as part of their business model, which is based on aftermarket support and services. They maintain that if DMPD is made Unlimited Rights like the rest of data necessary to perform OMIT, OEMs will not be able to make the business case to privately develop components and systems to sell to the Government. In such a case, they contend Government would need to fund the entire development of all systems or subsystems since they would refuse to bid on work which places privately funded and commercial systems or subsystems at risk. Industry members have noted supply chain resistance and no-bids on subcontracts which specifically require delivery of data necessary for OMIT if provided with Unlimited Rights.

Recommendation:

The Panel recommends no change to 10 U.S.C. 2320 or 10 U.S.C. 2321 to address this issue.

The Panel recommends a guide with definitions, key terms, and examples that distinguish DMPD which is entitled to restrictions where privately funded, as an exception to OMIT that qualifies for Unlimited Rights. The Guide could have a format similar to that provided in the Department of Defense Guidebook for Acquiring Commercial Items (February 24, 2017).

The Panel recommends an update to DFARS 227.7103-5(d)(2) to address depot requirements, and specifically the types of rights needed for depot maintenance in the scope of 10 U.S.C. 2460 and alternatives in the instance when the contractor is unwilling to license specific maintenance activities. Adapt similar guidance to depot requirements for non-commercial computer software at DFARS 227.7203-5, commercial technical data at 227.7102, and commercial computer software at 227.7202.

Cross-reference to other Tension Points: 1a, 2b, 2c, 2d, 2f, 5a, 5d, 5g, and 5i.